## UTILITY PATENT APPLICATION **TRANSMITTAL**

(Only for new nonnewisional applications under 37 CER 1 53/h))

Attorney Docket No.	MJ 2004-1	
First Inventor	Johnson	0
Title	Hybrid Semiconductor – Magnetic Spin Based Memory	<u> </u>
Express Mail Label No.	ER786140602US	<u>ن</u> ح

(Gray for field thoriprovisional applications under 57 GFK 1.55(b))	Express Mail Label No.   ETT 66 14660266
APPLICATION ELEMENTS See MPEP chapter 600 concerning utility patent application contents.	ADDRESS TO:  Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria VA 22313-1450
1. Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee processing)  Applicant claims small entity status. See 37 CFR 1.27.  Specification [Total Pages 32] (preferred arrangement set forth below) - Descriptive title of the invention - Cross Reference to Related Applications - Statement Regarding Fed sponsored R & D - Reference to sequence listing, a table, or a computer program listing appendix - Background of the Invention - Brief Summary of the Invention - Brief Description of the Drawings (if filed) - Detailed Description	7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)  8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)  a. Computer Readable Form (CRF)  b. Specification Sequence Listing on:  i. CD-ROM or CD-R (2 copies); or  ii. Paper  c. Statements verifying identity of above copies  ACCOMPANYING APPLICATION PARTS
- Claim(s)	ACCOMPANTING APPLICATION PARTS
- Abstract of the Disclosure  4. Drawing(s) (35 U.S.C. 113) [Total Sheets8]  5. Oath or Declaration [Total Sheets1]  a. Newly executed (original or copy)  b. Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 18 completed)  i. DELETION OF INVENTOR(S)     Signed statement attached deleting inventor(s)     name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).  6. Application Data Sheet. See 37 CFR 1.76  18. If a CONTINUING APPLICATION, check appropriate box, and suppose specification following the title, or in an Application Data Sheet under 37 CFR 1.76  Continuation Divisional Continuation:  Examiner Gene Auduong For CONTINUATION OF DIVISIONAL APPS only; The entire disclosure of the 5b, is considered a part of the disclosure of the accompanying continuation	9. Assignment Papers (cover sheet & document(s)) 10. 37 CFR 3.73(b) Statement Power of (when there is an assignee) Attorney 11. English Translation Document (if applicable) 12. Information Disclosure Copies of IDS Statement (IDS)/PTO-1449 Citations 13. Preliminary Amendment 14. Return Receipt Postcard (MPEP 503) (Should be specifically itemized) 15. Certified Copy of Priority Document(s) (if foreign priority is claimed) 16. Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. 17. Other:  Other:  Other:  Art Unit: 2818  Prior application, from which an oath or declaration is supplied under Box or divisional application and is hereby incorporated by reference.
The incorporation can only be relied upon when a portion has been inadvert	
19. CORRESPOND	DENCE ADDRESS
Customer Number: 23694	OR Correspondence address below
Name	
Address	
City	State Zip Code
Country	lephone Fax
Name (Print/Type) J. Nichoras Gross	Registration No. (Attorney/Agent)   34,175
Signature	Date February 10, 2004

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. 8ox 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. 8ox 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/17 (10-03)
Approved for use through 07/31/2006. OMB 0651-0032
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FFF TO A NOMITTAL	Complete if Known				
FEE TRANSMITTAL	Application Number	N/A			
for FY 2004	Filing Date	February 10, 2004			
Effective 10/01/2003. Patent fees are subject to annual revision.	First Named Inventor	Johnson			
<u> </u>	Examiner Name	N/A			
Applicant claims small entity status. See 37 CFR 1.27	Art Unit	N/A			
TOTAL AMOUNT OF PAYMENT (\$) 439	Attorney Docket No.	M.I 2004-1			

Check	TOTAL AMOUNT OF PAYMENT	(\$) 439	[	Attorr	ey Do	cket N	lo. MJ 2004-1	
Deposit Account	METHOD OF PAYMENT (check all that apply)		FEE CALCULATION (continued)					
Deposit Account:   233264		Other None	3. A	ITIDO	ONAL	. FEE	S	
Deposit Account Number Deposit			Large	Entity	Small	Entity		
Account Number   2332E4	<b>-</b>	1					Fee Description	Can Daid
Deposit Account  The Director is authorized to: (check all that apply)  □ Charge fee(s) indicated below variety or the filing fee  □ Charge fee(s) indicated below variety or the filing fee  □ Charge fee(s) indicated below variety or the filing fee  □ Charge fee(s) indicated below variety or any underpayment of fee(s)  □ Charge fee(s) indicated below variety or any underpayment of fee(s)  □ Charge fee(s) indicated below variety or any underpayment of fee(s)  □ Charge fee(s) indicated below variety or any underpayment of fee(s)  □ Charge fee(s) indicated below, except for the filing fee  □ the above-identified deposit account.  □ TEE CALCULATION  □ LBASIC FILING FEE  Large Entity Small Entity Fee Fee Pee Fee Fee Pee Fee Paid  □ 2001 385 Usity filing fee  □ 2010 340 2002 170 Design filing fee  □ 1003 430 2002 170 Design filing fee  □ 1004 770 2004 385 Reissue filing fee  □ 1005 160 2005 80 Provisional filing fee  □ 1007 170 2004 385 Reissue filing fee  □ 1008 180 2005 80 Provisional filing fee  □ 1009 770 2004 385 Reissue filing fee  □ 1008 180 2005 80 Provisional filing fee  □ 1008 180 2005 80 Provisional filing fee  □ 1009 770 2004 385 Reissue filing fee  □ 1009 770 2004 385 Reissue filing fee  □ 1008 180 2005 80 Provisional filing fee  □ 1009 770 2004 385 Reissue filing fee  □ 1009 770 2004 385 Reissue filing fee  □ 1009 180 2005 80 Provisional filing fee  □ 1009 770 2004 385 Reissue filing fee  □ 1009 770 2004 385 Reissue filing fee  □ 1009 180 200 200 200 200 200 200 200 200 200 2	Account 233264						r	ree Palo
Name The Director is authorized to: (check all that apply)  □ Charge fee(s) indicated below □ Credit any overpayments □ Charge fee(s) indicated below □ Credit any overpayments □ Charge fee(s) indicated below □ Credit any overpayments □ Charge fee(s) indicated below □ Credit any overpayments □ Charge fee(s) indicated below □ Credit any overpayments □ Charge fee(s) indicated below □ Credit any overpayments □ Charge fee(s) indicated below □ Credit any overpayments □ Charge fee(s) indicated below □ Credit any overpayments □ Charge fee(s) indicated below □ Credit any overpayments □ Charge fee(s) indicated below □ Credit any overpayments □ Charge fee(s) indicated below □ Credit any overpayments □ Charge fee(s) indicated below □ Credit any overpayments □ Charge fee(s) indicated below □ Credit any overpayments □ Charge fee(s) indicated below □ Credit any overpayments □ Charge fee(s) indicated below □ Credit any overpayments □ Charge fee(s) indicated below □ Credit any overpayments □ Charge fee(s) indicated below □ Credit any overpayments □ Charge fee(s) indicated below □ Credit any overpayment of fee(s) □ Charge fee(s) indicated below □ Charge fee(s) indicated below □ Credit any overpayment of fee(s) □ Charge fee(s) indicated below of property indin fire fee □ Charge fee(s) indicated below of property indin fire fee(s) □ Charge fee(s) indicated below of property indin fire fee(s) □ Charge fee(s) indicated property indin fire fee(s) □ Charge fee(s) indica	Deposit I Nichalas Crass		1052	50	2052	25		
Charge fee(s) indicated below	Name		1053	130	1053	130		
Charge any additional fee(s) or any underpayment of fee(s)   1804 920* 1804 920* 1804 920*   1804 920*   1804 920*   1804 920*   1804 920*   1805 1,840*			1812	2,520	1812 2	2,520	For filing a request for ex parte reexamination	
Charge fee(s) indicated below, except for the filling fee to the above-identified deposit account.    Tell Calculation			1804	920*	1804	920*		
The above-identified deposit account.			1005	1 040*	1005	1 940*		
1. BASIC FILING FEE   Large Entity   Small Entity   Fee	U · · · ·		1003	1,040	1603	1,040		
1. BASIC FILING FEE   Large Entity   Small Entity   Fee Paid   1255   1205   18   1201   186   1201   186   1201   186   1202   18   1205   18   1805		*******	1251	110	2251	55	Extension for reply within first month	-
Large Entity   Small Entity   Fee   Fee   Description   Fee   Paid   Code (\$)   Code (			1252	420	2252	210	Extension for reply within second month	
Total Claims			1253	950	2253	475	Extension for reply within third month	
1001 770   2001 385   Utility filing fee   385   1401 330   2255 1,005   Extension for reply within fifth month   1401 330   2401 165   Notice of Appeal   1403 330   2402 165   Filing a brief in support of an appeal   1402 330   2402 165   Filing a brief in support of an appeal   1402 330   2402 165   Filing a brief in support of an appeal   1402 330   2402 165   Filing a brief in support of an appeal   1402 330   145   Request for oral hearing   1403 1,510   1451 1,	Fee Fee Fee Fee Description	Fee Paid	1254	1,480	2254	740	Extension for reply within fourth month	
1002 340   2002 170   Design filling fee   385   1401 330   2401 165   Notice of Appeal   1003 530   2003 265   Plant filling fee   1402 330   2402 165   Filing a brief in support of an appeal   1403 290   2403 145   Request for oral hearing   1451 1,510   Petition to institute a public use proceeding   1451 1,510 1,510   1451 1,510   1451 1,510   1451 1,510   1451 1,510   1451 1,510   1451 1,510   1451 1,510   1451 1,510   1451 1,510   1451			1255	2,010	2255	1,005	Extension for reply within fifth month	
1003 530   2003 265   Plant filing fee   1402 330   2402 165 Filing a brief in support of an appeal 1403 290 2403 145 Request for oral hearing 1451 1,510 Petition to institute a public use proceeding 1451 1,510 Petition to revive - unavoidable 1452 110 2452 55 Petition to revive - unavoidable 1453 1,330 2403 145 Request for oral hearing 1451 1,510 Petition to revive - unavoidable 1453 1,330 2453 665 Petition to revive - unavoidable 1453 1,330 2501 665 Utility issue fee (or reissue) 1501 1,330 2501 665 Utility issue fee (or reissue) 1502 240 Design issue fee (or reissue) 1502 240 Design issue fee 1502 240 Design issue fee 1503 320 Plant issue fee 1503 320 Plant issue fee 1504 130 Petitions to the Commissioner 1504 130 Petitions to the Commissioner 1507 1807 50 Processing fee under 37 CFR 1.17(q) 1504 180 180 180 180 180 180 180 180 180 180	l l ' '	385	1401	330	2401	165	Notice of Appeal	
1004 770   2004 385   Reissue filing fee			1402	330	2402	165	Filing a brief in support of an appeal	
SUBTOTAL (1) (\$) 385  2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE Fee from Fee Paid Independent Claims Independent Claims Code (\$) Code (\$)  1202 18 2202 9 Claims in excess of 20 1201 86 2201 43 Independent claims over original patent Substance Substance Provisional filing fee	i i	. —	1403	290	2403	145	Request for oral hearing	
SUBTOTAL (1) (\$) 385  2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE Fee from below Fee Paid Independent Claims 26 -20** = 6 X 9 -54   1501 1,330 2501 665 Utility issue fee (or reissue) Independent Claims 3 - 3** = 0 X 0 -0   1502 480 2502 240 Design issue fee Independent Claims Substitute Independent Indepe	· · · · · · · · · · · · · · · · · · ·		1451	1,510	1451	1,510	Petition to institute a public use proceeding	
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE  Extra Claims	l '-		1452	110	2452	55	Petition to revive - unavoidable	
Total Claims			1453	1,330	2453	665	Petition to revive - unintentional	
Total Claims   26   -20** = 6   X   9   = 54   1502   480   2502   240   Design issue fee	2. EXTRA CLAIM FEES FOR UTILITY	AND REISSUE	1501	1,330	2501	665	Utility issue fee (or reissue)	·
Independent Claims  Multiple Dependent  Large Entity   Small Entity   Fee Fee Code (\$)   Code (\$)    1202   18   2202   9   Claims in excess of 20    1201   86   2201   43   Independent claims in excess of 3    1203   290   2203   145   Multiple dependent claims in excess of 3    1204   86   2204   43   **Reissue independent claims over original patent    1205   18   2205   9   **Reissue claims in excess of 20    1205   18   2205   9   **Reissue claims in excess of 20    1206   1807   50   Processing fee under 37 CFR 1.17(q)    1806   180   1806   180   Submission of Information Disclosure Stmt    Recording each patent assignment per property (times number of properties)    1809   770   2809   385   Filing a submission after final rejection (37 CFR 1.129(a))    1810   770   2810   385   For each additional invention to be examined (37 CFR 1.129(b))    1801   770   2801   385   Request for Continued Examination (RCE)    1801   770   2801   385   Request for expedited examination of a design application    SUBTOTAL (2)   (\$) 54    ***or number previously paid, if greater; For Reissues, see above    ***or number previously paid, if greater; For Reissues, see above    ***or number previously paid, if greater; For Reissues, see above    ***or number previously paid, if greater; For Reissues, see above    ***or number previously paid, if greater; For Reissues, see above    ***or number previously paid, if greater; For Reissues, see above    ***or number previously paid, if greater; For Reissues, see above    ***or number previously paid, if greater; For Reissues, see above    ***or number previously paid, if greater; For Reissues, see above    ***or number previously paid, if greater; For Reissues, see above    ***or number previously paid, if greater; For Reissues, see above    ***or number previously paid, if greater; For Reissues, see above    ***or number previously paid, if greater; For Reissues, see above    ***or number previously paid, if greater; For Reissues, see above    ***or number previously paid, if gr	Ext <u>ra Claim</u> s	below Fee Paid	1502	480	2502	240	Design issue fee	
Claims S 1460 130 Petitions to the Commissioner  Multiple Dependent 1807 50 1807 50 Processing fee under 37 CFR 1.17(q)  Large Entity   Small Entity   Fee Fee   Fee Fee   Code (\$)   1806 180   1806 180 Submission of Information Disclosure Stmt   8021 40 Recording each patent assignment per property (times number of properties)  1202 18 2202 9 Claims in excess of 20 1201 86 2201 43 Independent claims in excess of 3 1203 290 2203 145 Multiple dependent claim, if not paid 1204 86 2204 43 Reissue independent claims over original patent   1801 770 2801 385 For each additional invention to be examined (37 CFR 1.129(b)) 1205 18 2205 9 Reissue claims in excess of 20 and over original patent   1802 900 Request for expedited examination (RCE)  SUBTOTAL (2) (\$) 54  **or number previously paid, if greater; For Reissues, see above   Reduced by Basic Filing Fee Paid   SUBTOTAL (3) (\$)			1503	640	2503	320	Plant issue fee	
Large Entity   Small Entity   Fee Fee Code (\$)   Fee Description   1806   180   1806   180   Submission of Information Disclosure Stmt   8021   40   8021   40   Recording each patent assignment per property (times number of properties)   1809   770   2809   385   Filing a submission after final rejection (37 CFR 1.129(a))   1804   86   2204   43   1806   180   1806   180   1806   180   Submission of Information Disclosure Stmt   8021   40   Recording each patent assignment per property (times number of properties)   1809   770   2809   385   Filing a submission after final rejection (37 CFR 1.129(a))   1806   180   1806   180   1806   180   Submission of Information Disclosure Stmt   1809   770   2809   385   Filing a submission after final rejection (37 CFR 1.129(a))   1809   770   2810   385   For each additional invention to be examined (37 CFR 1.129(b))   1801   770   2801   385   Request for Continued Examination (RCE)   1801   770   2801   385   Request for Continued Examination (RCE)   1802   900   1802   900   Request for expedited examination of a design application   1806   180   1806   180   Submission of Information Disclosure Stmt   1809   770   2809   385   Filing a submission after final rejection (37 CFR 1.129(a))   1809   770   2810   385   For each additional invention to be examined (37 CFR 1.129(b))   1801   770   2801   385   Request for Continued Examination (RCE)   1801   770   2801   385   Request for expedited examination of a design application   1801   770   1802   900   180	Claims 5 - 3** = 0 X 0	=0	1460	130	1460	130	Petitions to the Commissioner	
Fee Fee Code (\$)  Fee Fee Code (\$)  The Code (\$)  Fee Fee Code (\$)  Fee Description  Fee Fee Code (\$)  Fee Description  Fee Fee Code (\$)  Fee Description  Fee Fee Code (\$)  Fee Description  Fee Fee Code (\$)  Fee Description  Fee Paid Submission after final rejection  Filing a	Multiple Dependent	=	1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
Code (\$)  Code (			1806	180	1806			
1202 18 2202 9 Claims in excess of 20 1201 86 2201 43 Independent claims in excess of 3 1203 290 2203 145 Multiple dependent claims over original patent 1204 86 2204 43 **Reissue independent claims over original patent 1205 18 2205 9 **Reissue claims in excess of 20 and over original patent  SUBTOTAL (2) (\$) 54 ***or number previously paid, if greater; For Reissues, see above  1809 770 2809 385 Filing a submission after final rejection (37 CFR 1.129(a))  1810 770 2810 385 For each additional invention to be examined (37 CFR 1.129(b))  1801 770 2801 385 Request for Continued Examination (RCE)  1802 900 1802 900 Request for expedited examination of a design application  Other fee (specify)  *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$)	Code (\$) Code (\$)		8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1203 290 2203 145 Multiple dependent claim, if not paid 1204 86 2204 43 ** Reissue independent claims over original patent  1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent  SUBTOTAL (2) (\$) 54  **or number previously paid, if greater; For Reissues, see above  1810 770 2810 385 For each additional invention to be examined (37 CFR 1.129(b))  1801 770 2801 385 Request for Continued Examination (RCE)  1802 900 1802 900 Request for expedited examination of a design application  Other fee (specify)  *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$)			1809	770	2809	385	Filing a submission after final rejection	
1204 86 2204 43 Reissue independent claims over original patent  1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent  SUBTOTAL (2) (\$) 54  **or number previously paid, if greater, For Reissues, see above  1801 770 2801 385 Request for Continued Examination (RCE)  1802 900 Request for expedited examination of a design application  Other fee (specify)  *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$)			1810	770	2810	385	For each additional invention to be	
and over original patent  SUBTOTAL (2)  **or number previously paid, if greater, For Reissues, see above  of a design application  Other fee (specify)  *Reduced by Basic Filing Fee Paid  SUBTOTAL (3) (\$)			1801	770	2801	385	•	
SUBTOTAL (2) (\$) 54 **or number previously paid, if greater; For Reissues, see above  Other fee (specify) *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$)			1802	900	1802	900		
*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$)  *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$)			Other	fee (sp	ecify)			
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Registration No. Telephone 415-355-9800 Name (Print/Type) 34,175 J\_Nicholas-Gross∖ (Attorney/Agent) February 10, 2004 Date Signature

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